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10/693,392	10/24/2003	Jeffrey P. Snover	MS1-1738US	1997

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EXAMINER	
CAO, DIEM K	

ART UNIT	PAPER NUMBER
2194	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/693,392	SNOVER ET AL.	
	Examiner	Art Unit	
	Diem K. Cao	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/1/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-38 are presented for examination. Applicant has amended claims 1, 19, 28, and added claims 29-38.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-38 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 10-27 and 29-37 of copending Application No. 10/883,373. Although the conflicting claims are not identical, they are not patentably distinct from each other because of corresponding language that recites virtually all of the same elements and functions claimed in the application 10/883,373:

In application 10/693,392:

Claim 1. A computer readable medium encoded with a data structure, comprising:

a parameter definition for at least one expected input parameter; and

an instruction-based mechanism that is operative to identify information within an input source for each of the expected input parameters based on the respective definition for the expected input parameter and to process the expected input parameter based on the information when the data structure becomes instantiated into an object, ***the input source comprising at least one live object***.

Claim 19. A computer-executable method for populating parameters declared within a data structure, the method comprising:

obtaining an expected name for a parameter, the expected name being assigned in a declaration for the parameter within a data structure;

identifying a label within an input source correlating to the expected name, ***the input source comprising at least one live object***;

retrieving a value associated with the label; and

assigning the value to the parameter.

Claim 29. A computer-readable medium encoded with a data structure that provides a template for creating an application, the data structure comprising:

a name identifying an application;

at least one member;

a method;

a parent class from which the application derives, the parent class being provided by an object-based environment and providing processing that executes the method for each set of

input received for at least one member when the application is invoked, ***wherein the set of input comprises at least one live object***.

In application 10/883,373

Claim 1. A computer readable medium encoded with a data structure, comprising:

a parameter definition for at least one expected input parameter; and

an instruction-based mechanism that is operative to identify information within an input source for each of the expected input parameters based on the respective definition for the expected input parameter and to process the expected input parameter based on the information when the data structure becomes instantiated into an object, ***the input source not comprising a live object***.

Claim 19. A computer-executable method for populating parameters declared within a data structure, the method comprising:

obtaining an expected name for a parameter, the expected name being assigned in a declaration for the parameter within a data structure;

identifying a label within an input source correlating to the expected name, ***the input source not comprising a live object***;

retrieving a value associated with the label; and

assigning the value to the parameter.

Claim 30. A computer-readable medium encoded with a data structure that provides a template for creating an application, the data structure comprising:

a name identifying an application;

at least one member;

a method;

a parent class from which the application derives, the parent class being provided by an object-based environment and providing processing that executes the method for each set of input received for at least one member when the application is invoked, ***wherein the set of input does not comprises a live object***.

The claimed differences would be obvious to a programmer of ordinary skill in the art because the instant claims are merely alternate and/or more narrow variations of the claims recited in the 10/883,373 application.

Because the instant claims merely alterative claim limitations from the set of elements and functions claimed in 10/883,373 application, such modifications would be readily apparent to a programmer of ordinary skill.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-18, 29-36 and 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer

readable medium is define as a ***"wave"*** (such as a carrier wave), see specification, page 7, lines 7-19. In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention.

See MPEP 2106.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 4-7, 10, 13-17, 19-23, 26 and 27-38 are rejected under 35 U.S.C. 102(b) as being anticipated over Gillis et al. (U.S. 6,286,035 B1).

As to claim 1, Gillis teaches a computer readable medium (computer, in-memory; col. 4, lines 45-48) encoded with a data structure (compiled tables, object code), comprising:

a parameter definition for at least one expected input parameter (Tparam also contains for each parameter its type, range, default value, and whether the particular parameter is required for the message currently being validated; col. 7, lines 10-13); and

an instruction-based mechanism (the compiled message parsing engine is stored as object code 100; col. 4, lines 45-46) that is operative to identify information (message ID, parameters; col. 7, lines 41, 45-46) within an input source (data string; col. 7, line38-40) for each of the

expected input parameters based on the respective definition for the expected input parameter and to process the expected input parameter based on the information when the data structure becomes instantiated into an object (The system code then calls the doValidate() routine ...found in the table, the message data structure has been populated with valid parameter; col. 7, line 38 - col. 8, line 58), the input source comprising at least one live object (command; col. 7, line 39 and col. 3, lines 36-38).

As to claim 2, Gillis teaches the input source comprises a string (command message; col. 3, line 37).

As to claim 4, Gillis teaches the string comprises a part of a command string entered on a command line (col. 1, lines 29-33).

As to claim 5, Gillis teaches wherein the parameter definition comprises a data type and a name for the expected input parameter (col. 7, lines 5-14).

As to claim 6, Gillis teaches wherein the information comprises a value (value of the received parameter; col. 8, lines 28-31).

As to claim 7, Gillis teaches wherein the parameter definition comprises a data type and a name for the expected input parameter (col. 7, lines 5-14), and wherein the mechanism further coerces the value into a converted value having the data type specified in the definition (the

value of the received parameter is translated to a value to be placed in the data structure of this message using translation information found in this parameter's description; col. 8, lines 36-39).

As to claim 10, Gillis teaches wherein the input source comprises a precisely parseable stream (parsing the potential command message; col. 7, lines 45-46).

As to claim 13, Gillis teaches a mapping mechanism that is operative to associate a mapped name with the expected input parameter, wherein identifying the information is based on the mapped name (see col. 6, line 63 - col. 7, line 15).

As to claim 14, Gillis teaches wherein the mechanism comprises a method inherited from a class provided within a runtime environment (doValidate(); col. 7, line 52).

As to claim 15, Gillis teaches wherein the parameter definition comprises a direct specification within the data structure (type, range, default value; col. 7, lines 10-15).

As to claim 16, Gillis teaches wherein the direct specification comprises a parameter declaration (type; col. 7, lines 10-15).

As to claim 17, Gillis teaches wherein the parameter definition comprises an indirect specification associated with the data structure (whether the particular parameter is required for the message currently being validated; col. 7, lines 10-15).

As to claim 19, Gillis teaches a computer-executable method for populating parameters declared within a data structure (abstract), the method comprising:

obtaining an expected name for a parameter, the expected name being assigned in a declaration for the parameter within a data structure (determined whether an associated parameter description is found using the unique key of the received parameter; col. 7, lines 60-62),

identifying a label within an input source correlating to the expected name (the function finds the associated received parameter using the unique key of the parameter descriptor; col. 8, lines 17-20), the input source comprising at least one live object (command; col. 7, line 39 and col. 3, lines 36-38),

retrieving a value associated with the label (the value of the received parameter; col. 8, lines29-30), and

assigning the value to the parameter (the value of the received parameter ... message structure; col. 8, lines 35-43).

As to claim 20, Gillis teaches wherein the expected name and label are identical (unique key; col. 7, lines 60-63).

As to claim 21, Gillis teaches providing mapping information that defines an alias name for the expected name and identifying the label based on the alias name (unique key; col. 7, lines 60-63).

As to claim 22, Gillis teaches wherein the input source comprises a command string entered on a command line (col. 1, lines 29-33) and the alias name is provided within the command string (unique key; col. 7, lines 60-63).

As to claim 23, Gillis teaches wherein the alias name is provided within a data store (the function finds the associated received parameter using the unique key of the parameter descriptor; col. 8, lines 17-20).

As to claim 26, see rejection of claim 4 above.

As to claim 28, it is the same as the method claim of claim 19 except it is a system claim and is rejected under the same ground of rejection.

As to claim 29, Gillis teaches a computer readable medium encoded with a data structure that provides a template for creating an application (abstract), the data structure comprising:

a name identifying an application (inherent from the command is from a client sent to the server to execute a method, and after parsing and validating, the newly constructed command is sent to a software module for execution; col. 1, lines 30-32 and col. 4, line 65 - col. 5, line 1, and tid is the Target ID; col. 6, line 55),

at least one member (parameters; col. 3, line 47),

a method (verb is the command code; col. 6, line 54),

a parent class from which the application derives (object code 100; col. 7, lines 36-37), the parent class being provided by an object-based environment and providing processing that executes the method for each set of input received for the at least one member when the application is invoked (col. 4, line 45 - col. 5, line 1), wherein the set of input comprises at least one live object (command; col. 7, line 39 and col. 3, lines 36-38).

As to claim 30, Gillis teaches wherein the at least one member comprises an expected input parameter (each parameter in the string; col. 7, line 51).

As to claim 31, Gillis teaches wherein the parent class further provides validation processing on each set of input for the expected input parameter and does not execute the method for one set of input if the one set fails the validation processing (col. 7, lines 38-55).

As to claim 32, Gillis teaches wherein the application comprises a command in a pipeline of commands and the set of input comprises results from a previous command in the pipeline of commands (col. 1, lines 30-37 and col. 4, line 65 - col. 5, line 6).

As to claim 33, Gillis teaches wherein each set of input includes an identifier that associated the input with the member (messageID; col. 7, lines 40-42).

As to claim 34, Gillis teaches wherein the parent class further provides a mapping process that allows a specified alias for the identifier (unique key; col. 7, lines 56-65 and col. 8,

lines 15-20).

As to claim 35, Gillis teaches wherein the application comprises a command (doValidate() routine with a appropriate argument; col. 7, lines 42-44) and the specified alias is provided as an argument to the command when the command is invoked (unique key of the received parameter; col. 7, lines 60-63).

As to claim 36, Gillis teaches wherein the command is invoked via an object-based command line environment (col. 1, lines 29-33).

As to claim 37, Gillis teaches comprising validating the value and wherein assigning the value to the parameter occurs if the value passes the validation (col. 8, lines 29-43).

As to claim 38, Gillis teaches wherein the live object is of a data type having a method, the method being directly invocable when processing the expected input parameter (command; col. 7, line 39 and col. 3, lines 36-38 and col. 4, line 65 - col. 5, line 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3, 8, 12, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis et al. (U.S. 6,286,035 B1) in view of Lee (U.S. 6,405,365 B1).

As to claim 3, Gillis does not teach the string comprises a part of a script. However, Lee teaches the string comprises a part of a script (next instruction in Instructions File 150; col. 8, lines14-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Lee to the system of Gillis because Lee teaches an alternate method to validate not only a single command but a file of command, thus it would improve the performance of the Gillis system.

As to claim 8, Lee teaches wherein the input source comprises a set of objects (instructions in the Instructions File 150; ; col. 8, lines14-15).

As to claim 12, Gillis does not explicitly teach wherein the mechanism further identifies and populates each expected input parameter for each record within the input source. However, Lee teaches the mechanism further identifies and populates each expected input parameter for each record within the input source (col. 8, lines 6-13, lines 43-49).

As to claim 25, Gillis does not teach wherein the input source comprises a database table. However, Lee teaches wherein the input source comprises a table (Instructions File 150; col. 8, lines14-15).

As to claim 27, see rejection of claim 3 above.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis et al. (U.S. 6,286,035 B1) in view of Lee (U.S. 6,405,365 B1) further in view of Jones (Parse and Validate Command Line Parameters with VB.NET).

As to claim 9, Gillis and Lee do not teach wherein the set of objects comprises .NET objects. However, Jones the set of objects comprises .NET object (In VB.NET, you can obtain the command line passed to the VB.NET via the Command() function; page 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Jones to the system of Gillis and Lee because Jones teaches how to parse and validate .NET command line, thus, the system of Gillis can be improve to validate new type of objects.

10. Claims 11, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis et al. (U.S. 6,286,035 B1) in view of Lee (U.S. 6,405,365 B1) further in view of Allen (U.S. 6,658,625 B1).

As to claim 11, Gillis do not teach wherein the precisely parseable stream comprises an XML-based document. However, Allen teaches a parser parses and validates an XML document (col. 19, lines 35-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Allen to the system of Gillis because Allen

teaches a method to parse and validate XML documents, thus the system of Gillis would be improve because it not only can process command but also XML documents.

As to claim 18, Gillis does not explicitly teach wherein the indirect specification comprises a reference to an XML-based document that defines the at least one expected input parameter. However, Allen teaches the indirect specification comprises a reference to an XML-based document that defines the at least one expected input parameter (col. 6, lines 35-42).

11. Claims 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis et al. (U.S. 6,286,035 B1) in view of Allen (U.S. 6,658,625 B1).

As to claim 24, Gillis does not teach wherein the input source comprises an XML document. However, Allen teaches a parser parses and validates an XML document (col. 19, lines 35-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Allen to the system of Gillis because Allen teaches a method to parse and validate XML documents, thus the system of Gillis would be improve because it not only can process command but also XML documents.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC
June 6, 2007

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER